

The Relevance of Information Behaviour For Nurses Working With Government Hospitals In Kerala

Dr Priya Prasad¹, Dr Jubi R²

¹Associate Professor, Rajadhani Business School, Kerala, India

²Professor & HoD, Rajadhani Business School, Kerala, India

DOI: 10.47750/pnr.2023.14.S01.86

Abstract

Information is a key issue in the information age. The real challenge of this time is not producing information or storing information, but getting people to use information appropriately. Information is a critical resource in the operation and management of organisations. Timely availability of relevant information is vital for effective performance of managerial functions such as planning, organising, leading and controlling. There is a universal assumption that man was born innocent or ignorant and should actively seek knowledge. Information Behaviour is a broad term encompassing the ways individuals articulate their information needs, seek, evaluate, select and use information. In this era of information, it is very relevant for any type of the professionals to have the updated information at the right time in the right mode. The present study concentrates the relevance of information behaviour for nurses, especially working with the Government hospitals in Kerala.

Key words: storing information, use information, information behaviour for nurses.

INTRODUCTION

With information deluge, everyone needs information of increasing variety and diversity of level, frequency, volume and ease. This situation has given rise to the growth concept of information searching and the manner of determining the pattern of searching is said to be Information Behaviour. It is a sub discipline in Library and Information Science. It describes how people need, seek, manage, give and use information in different contexts. It may also be described as Information -Seeking Behaviour or Human Information Behaviour. Information Behaviour is one of the richest research areas in the field of Library and Information Science. During the sixties and seventies, the focus of the study was rather on the system and researchers tried to understand the users and their needs through the study of the system or the resources used. Different approaches have been adopted for the study of information behaviour of different user groups and new methodologies have been developed or adopted from other fields such as Social Sciences. However, most of the literature in this field of study has been scattered in research papers and book chapters.

REVIEW OF LITERATURE

Knowledge about the information behaviour and information use of individuals is crucial for effectively meeting their information needs. Wilson noted that the study of information behaviour can stand on its own area of applied research where the motive for investing is pragmatically related to system design and development. This is an area of basic research and although the resulting knowledge may have practical applications, there is no necessity that it should. Therefore, what, when and how information is gathered and used by nurses is of critical importance to meet their information needs.

In Kerala, a total of 64 Medical College, General, District or Speciality hospitals cater to the health need of its people. Out of the 64 major hospitals, samples of 55 hospitals were selected. Nurses work in an information undated environment. Their information use in the decision-making process directly effects the well- being of patients. They lack database – searching skills. So, more database training, more patient care information and better computer skills are needed for seeking information. Nurses work in an information undated environment. Their information use in the decision-making process directly effects the well- being of patients. They lack database –searching skills. So, more database training, more patient care information and better computer skills are needed for seeking information.

RELEVANCE OF THE STUDY

More research has conducted in the area in the same scenario and this shows that, the nurses are playing a crucial role as the nurses are the real nightingale who are serving for the society at any time. The nurses are need of information content as they need the updated information for maintaining the health care of patients. In this scenario the need of information is relevant and hence the topic is very having highest priority.

OBJECTIVES OF THE STUDY

- To examine the information, need of nurses in Government hospitals in Kerala.
- To evaluate the information seeking behaviour of nurses in Government hospitals in Kerala.
- To assess the purpose of information seeking and to determine the methodology of accessing information.
- To identify the use of information in the clinical practice of nurses in Government hospitals in Kerala.
- To measure the barriers to information behaviour in nurses working in Government hospitals in Kerala.

VARIABLE IDENTIFICATION

A focus group discussion was conducted among selected medical practitioners and nurses working in Government hospitals to understand the variables that are influencing the information behaviour of nurses in Government hospitals in Kerala. The identified variables were drafted in to a survey questionnaire and were administered using qualitative methods and the research questionnaire finalized.

SAMPLING: DESIGN & PROCEDURE

| Sl. No. | Details | |
|---------|--------------------|---|
| 1 | Population | Total nurses working in 64 Government hospitals in Kerala |
| 2 | Sampling frame | Nurses on roll during the survey period |
| 3 | Sampling technique | Stratified sampling Strata – District wise Government hospitals In each Strata – Simple Random Sampling of hospitals In each sample hospital –nurses selected using Simple random method |
| 4 | Sample size | 385* Confidence level – 95 % Confidence interval – 5 % |

* based on sample size formula

HYPOTHESIS FORMULATION

The following hypotheses were formulated which were tentative answers to the research questions:

- There is no significant difference among information context groups and the information need and demand of the nurses working in Government hospitals in Kerala
- There is no significant difference among education groups and information seeking behaviour of the nurses working in Government hospitals in Kerala
- There is no association between demographic variables viz., marital status, age, education and years of experience and information seeking.

MEASUREMENT & SCALING

Measurement: The primary scales like nominal, ordinal, interval and ratio scales were used to capture the information from the nurses working in Government hospitals in Kerala

Scaling: Rank order scaling and multiple item scales were used

Reliability: The reliability of the scale was tested through the Coefficient alpha. The scale has a score of 0.80 with the Cronbach's alpha.

Validity: The content validity of the scale was undertaken by systematic evaluation of how well the content represents the measurement through the brainstorming with the medical practitioners/nurses working in Government hospitals.

STATISTICAL TOOLS USED

The following tools were used to infer the data collected through the survey questionnaire.

1. T- Tests
2. Garrett Ranking
3. One way analysis of Variance (ANOVA)
4. Factor Analysis

ANALYSIS AND INTERPRETATION

To examine the information, need of nurses in Government hospitals in Kerala.

Information need of Nurses in Government Hospitals in Kerala during Clinical Support The information needs of nurses in Government hospital depend on the expectation from the stakeholders involved in the health delivery process and the motivation level of the nurses. The information need of nurses were grouped under four needs viz., 'patient care information', 'emergency care information', 'patient evaluation' and 'others. The details are given in the table.

Information Need of Nurses in Government Hospitals in Kerala

| Information Need | Frequency | Percent | Cumulative Percent |
|----------------------------|-----------|---------|--------------------|
| Patient Care Information | 266 | 69.1 | 69.1 |
| Emergency Care Information | 46 | 11.9 | 81.0 |
| Patient Evaluation | 73 | 19.0 | 100.0 |
| Total | 385 | 100.0 | |

Source: Primary Data

Table shows that 69.10 percent of the nurses working in Government hospital need patient care information followed by 19.00 percent of the nurses need patient evaluation information. Around 11.90 percent of the nurses need emergency care information. The analysis infers that majority of the nurses working in Government hospital need patient care information.

Factors influencing information seeking by nurses in Government Hospitals in Kerala

The factors influencing information seeking by nurses in Government hospitals in Kerala were classified under ten categories viz. applicability, habit, reliability, trustworthiness, high quality, speed of use, cost, familiarity with and prior success, convenience or ease of access and packaging and these factors were ranked by the nurses. The ranking was analyzed using Garret Ranking Method and the results are tabulated in the following table.

Factors Influencing Information Seeking

| Sl. No. | Factors | Garret sum of scores | Average Score | Rank |
|---------|---|----------------------|---------------|------|
| 1 | Applicability | 23741 | 62 | II |
| 2 | Habit | 17801 | 46 | VIII |
| 3 | Reliability | 25014 | 65 | I |
| 4 | Trustworthiness or belief that a source will provide accurate information | 22326 | 58 | III |
| 5 | High quality | 18846 | 49 | VI |
| 6 | Speed of use | 20134 | 52 | V |
| 7 | Cost | 12312 | 32 | X |
| 8 | familiarity with and prior success in using a source | 18454 | 48 | VII |
| 9 | Convenience or Ease of access | 21889 | 57 | IV |
| 10 | Packaging (format in which the information is provided) | 13844 | 36 | IX |

Source: Primary Data

The scores provided by the nurses working in Government hospitals in Kerala were summed using the Garret method and the average scores for each factor obtained. The average scores were converted into rank and it is evident from the table shows that reliability (Rank I) was a major factor in information seeking with the average score of 65 followed by applicability (Rank II) with the average score of 62. Trustworthiness or belief that a source will provide accurate information is the third factor (Rank III) which had an average score of 58. The analysis infers that reliability was the major decision factor in information seeking followed applicability.

Association between education and Information seeking behaviour of Nurses in Government Hospitals in Kerala

The research attempted to understand the relationship between the education and information seeking behaviour of nurses working in Government hospitals in Kerala using Analysis of variance (ANOVA) with the null hypothesis as, "There is no significant difference among education groups and information seeking behaviour of the nurses working in Government hospitals in Kerala". The descriptive comparing four education group with the information seeking behaviour variables were tabulated in the table.

Mean and the Standard Deviation Comparing Four Education Groups

| Sl. No | Education | n | Information Seeking | | Information Need | |
|--------|------------------|-----|---------------------|----------------|------------------|-------|
| | | | Active Seeker | Passive Seeker | M | SD |
| 1. | High School | 18 | 4.39 | 0.698 | 3.53 | 0.915 |
| 2. | Higher Secondary | 222 | 3.92 | 0.809 | 3.09 | 0.012 |
| 3. | Degree | 130 | 4.02 | 0.826 | 3.07 | 0.080 |
| 4. | Post Graduate | 15 | 3.67 | 0.816 | 2.33 | 0.188 |
| | Total | 385 | 3.96 | 0.816 | 3.06 | 0.52 |

Source: Primary Data

The table shows that the mean value of 'information seeking' is 4.39 for high school educated and 3.67 for post graduates. The mean value of 'information need' is 3.53 for high school educated and 2.33 for post graduate.

The assumption, that variances of the experience groups were equal, i.e. not significantly different, were checked and it was found that two variables of information seeking & need are not significant and hence the assumption of equal variances was not violated. The following table provides the result for the overall F test which was significant for the information seeking & need variables.

ANOVA Summary table Comparing Education Groups

| Sl. No. | Information Seeking Behavior | df | Sum of Squares | Mean Square | F | p |
|---------|------------------------------|-----|----------------|-------------|-------|-------|
| 1 | Information Seeking | 3 | 5.370 | 1.790 | 2.727 | 0.004 |
| | Between Groups | 381 | 250.121 | 0.656 | | |
| | Within Groups | 384 | 255.491 | | | |
| | Total | | | | | |
| 2 | Information Need | 3 | 13.068 | 4.356 | 4.025 | 0.008 |
| | Between Groups | 381 | 412.308 | 1.082 | | |
| | Within Groups | 384 | 425.377 | | | |
| | Total | | | | | |

Source: Primary Data

The table shows that there is a statistically significant difference found among the four levels of education in ‘information seeking’, $F(3, 381) = 2.727, p = 0.004$, and ‘information need’, $F(3, 381) = 4.025, p = 0.008$. Based on the p values all the variables were significant and hence the null hypothesis is rejected. It may be concluded that there is significant difference in education and the information seeking & need of nurses working in Government hospitals in Kerala. In other words, the less educated seek more information and the information needs are higher among the nurses working in Government hospitals in Kerala and vice versa.

Source of Clinical Knowledge Updation by Nurses in Government Hospitals in Kerala

The source of clinical knowledge updation by nurses in Government hospital depends on the social and personal motivation. The sources were grouped under four categories viz., ‘Hospital Journals’, ‘Colleagues’, ‘Library’, and ‘Online resources. The details are given in the table given below.

Source of Clinical Knowledge Updation by Nurses in Government Hospitals in Kerala

| Source of Clinical Knowledge | Frequency | Percent | Cumulative Percent |
|------------------------------|-----------|---------|--------------------|
| Hospital Journals | 83 | 21.6 | 21.6 |
| Support of colleagues | 73 | 19.0 | 40.5 |
| Library | 18 | 4.7 | 45.2 |
| Online Resources | 211 | 54.8 | 100.0 |
| Total | 385 | 100.0 | |

Source: Primary Data

The above table shows that 54.80 percent of the nurses use online resources for clinical knowledge updation followed by 21.60 percent use hospital journals. Around 19.00 percent seek the support of their colleagues to update clinical knowledge. The analysis infers that majority of the nurses in Government hospital use online resources for updating the clinical knowledge.

Barrier to information behaviour by Nurses in Government Hospitals in Kerala

The barrier to information behaviour limits the nurses in Government hospitals in Kerala to leverage the effectively utilise the resources made available at the health care facilities. Therefore, the barriers to information behaviour were tested using 17 variables which cover the broader information behaviour. The 17 barriers to information behaviour were measured on a five-point Likert scale with options from strongly disagree to strongly agree. The scores assigned on this scale were 1, 2, 3, 4 and 5 respectively. The research attempted to test the barrier to information behaviour using the one-sample t test which is used to compare one group to the hypothesized population mean. The mean scores for the different information barrier variables and the ‘t’ statistics revealing the significance of the differences among the barrier variables according to the information seeking behaviour viz. active seekers and passive seekers. The results are tabulated in the table.

Barriers to information behavior of nurses

| Sl. No. | Variables | Information Seeking | | 't' Statistics |
|---------|------------------------------|---------------------|-----------------|----------------|
| | | Active Seekers | Passive Seekers | |
| 1. | Lack of motivation | 3.11 | 3.26 | -2.060 |
| 2. | Practice change | 3.54 | 3.16 | 5.315* |
| 3. | Personal Experience | 3.21 | 3.19 | 0.270 |
| 4. | Lack of social support | 3.64 | 3.15 | 6.961* |
| 5. | Lack of idea exchange | 2.88 | 2.79 | 1.228 |
| 6. | Non availability of synergy | 3.68 | 4.00 | -2.814* |
| 7. | Management Commitment | 2.92 | 2.76 | 1.888 |
| 8. | Computer training skills | 3.57 | 2.65 | 11.084* |
| 9. | Hospital Culture | 3.32 | 2.84 | 6.390* |
| 10. | Non-Availability | 2.13 | 2.73 | -7.301 |
| 11. | Routine application | 3.48 | 3.16 | 4.829* |
| 12. | Lack of presentation | 2.36 | 2.95 | -10.052 |
| 13. | Difficulty in implementation | 2.65 | 3.41 | -7.333 |
| 14. | Lack of Practice | 3.86 | 2.98 | 7.073 |
| 15. | Expensive access | 2.12 | 2.61 | -6.025 |
| 16. | Complicated Information | 2.64 | 2.82 | -1.818 |
| 17. | Too Academic | 2.12 | 2.77 | -6.466* |

* Significant at 5 percent level.

The table shows that a significant difference among the active and passive information seeking group were identified with the help of 't' test. It can be seen from the table that practice change, lack of social support, non-availability of synergy, computer training skills, hospital culture, routine application and too academic are significant at 5 percent level.

RESULTS AND DISCUSSION

Information demand of nurses working in Government hospitals are based on the type of duty and hence demand specific search and queuing of database along with the patient information system will encourage nurses to utilise the queuing information

As reliability and applicability are the factors influencing information seeking behaviour hospitals may go in for high reliable and authenticated database at the State level shared across all medical college, district, general and speciality hospitals which will reduce cost of ownership and also ensure availability among the information seekers.

Since active information seekers are aware of the source and exhibit information seeking behaviour, the nurses in the Government hospitals can be provided with incentives/rewards so that the passive seekers also seek information which will be used in their clinical practices.

The automation of information systems of the patients in the medical college, district, general and speciality hospitals along with doctor recommendations and prescriptions will help nurses associate available medical information with the medical research and findings. Also, the motivation level and knowledge of nurses will improve so that information behaviour of nurses can be enhanced.

The monetary and reward compensation has to be integrated in the performance evaluation of the nurses so that the lack of urgency in sharing information can be mitigated. Also, key result areas can be defined for nurses working in hospitals so that information sharing and updation take place thus improving the knowledge management of the health industry.

REFERENCES

1. Ashkanasy, Neal M., Claire E. Ashton-James, and Peter J. Jordan. "Performance impacts of appraisal and coping with stress in workplace settings: The role of affect and emotional intelligence." *Emotional and Physiological Processes and Positive Intervention Strategies*. Emerald Group Publishing Limited, 2003. 1-43.
2. Wilson. T. D. On User Studies and Information needs. *Journal of Documentation*, 1981, 37(1), 3-15.
3. Thompson C, et al (2001). Research Information in nurses' clinical decision making: What is useful? *Journal of Advanced Nursing* 36(3), 376-88. Retrieved November 3, 2005, from Pub Med database.
4. Harrod's Librarians Glossary of terms used in Librarianship, documentation and the book crafts and reference book 5th ed. England; Gower:1984.
5. Marchionini, G. *Information Seeking in Electronic Environments*. Cambridge University Press, UK, 1995.
6. Zhang Y, the impact of internet based electronic resources on formal scholarly communication in the area of Library and Information, *Journal of Information Science*, 24(4) (1998) 241-254